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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,215	04/10/2001	Branislav N. Meandzija	GIC-556	5948

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01/24/2005

Barry R Lipsitz
Building 8
755 Main Street
Monroe, CT 06468

EXAMINER

FISH, JAMIESON W

ART UNIT	PAPER NUMBER
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2616

DATE MAILED: 01/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/807,215	MEANDZIJA, BRANISLAV N.	
	Examiner	Art Unit	
	Jamieson W. Fish	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 April 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/10/2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The information disclosure statement (IDS) filed on April 10, 2001 has been considered by the examiner.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims **1-3, 6-7, 12-14, 17-18** are rejected under 35 U.S.C. 102(e) as being anticipated by Bopardikar et al. (U.S. #6,052,739).
4. Regarding claim **1**, Bopardikar teaches a television set-top terminal (See Col. 3 lines 21-22) with software, comprising: a computer readable medium having computer program code means (See Fig. 1 Memory 14 and Col. 3 lines 24-29, 41-42); and means for executing said computer program code means to implement a layered software architecture wherein: an application layer allows a user to interact with the terminal (See Fig. 2 Application Programs 36 and Col. 3 lines 53-56); a middleware layer supports the application layer by providing Application Program Interfaces (APIs) (See Fig. 2 Java Virtual Machine 40 and Col. 3 lines 56-63 JVM executes APIs); an operating

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system layer supports the middleware layer (See Fig. 2 OS native layer 61 and Col. 4 lines 35-46); a hardware layer supports the operating system layer (See Fig. 2 Boot Interface 64 and Col. 4 lines 61-67); and said layered software architecture allows configuration of a functionality of the application layer and the middleware layer independently of the operating system layer and the hardware layer (See Fig. 2 Platform Independent 32 and Col. 3 lines 40-52).

5. Regarding claim 2, Bopardikar teaches wherein: the layered software architecture includes a set top management layer that supports the application layer by configuring management services of the terminal (See Fig. 2 System Database 56 and Col. 4 lines 20-31).

6. Regarding claim 3, Bopardikar teaches said management services include at least one of application, user, resource and presentation management (See Col. 4 lines 20-30). The USPTO considers Applicant's "at least one of" language to be anticipated by any reference containing one of the ~~presenting~~ corresponding elements.

7. Regarding claim 6, Bopardikar teaches an application program interface API for providing configurable functionality (See Col. 4 lines 20-28 System database contains configuration information. A database is an API).

8. Regarding claim 7, Bopardikar teaches wherein said API enables said terminal to support multiple users (See Col. 4 lines 22-29. "what user and group attributes have been selected").

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9. Regarding claims **12-14** and **17-18**, they are method claims corresponding to the apparatus claims 1-3 and 6-7, respectively. Therefore, claims 12-14 and 17-18 are analyzed and rejected according to claims 1-3 and 6-7.

10. Claims **1**, **11**, **12**, and **22** are rejected under 35 U.S.C. 102(a) as being anticipated by Evain ("The Multimedia Home Platform" EBU Technical Review –Spring 98).

11. Regarding claims **1** and **11**, Evain teaches a television set-top terminal with software, comprising: a computer readable medium having computer program code means (See pages 1 and 9 Hardware and Software Resources, ROM); and means for executing said computer program code means to implement a layered software architecture wherein: an application layer allows a user to interact with the terminal (See Fig. 1 Mother board CPU); a middleware layer supports the application layer by providing Application Program Interfaces (APIs) (See Fig. 3 Middleware); an operating system layer supports the middleware layer (See Fig. 1 Basic OS layer); a hardware layer supports the operating system layer (See Figs. 2 and 3 Hardware/software resources); and said layered software architecture allows configuration of a functionality of the application layer and the middleware layer independently of the operating system layer and the hardware layer (See Page 5 "Platform-independence is ensured by relying on embedded RTES, virtual machines or other interactive engines") further comprising at least one of: a set top manager; a presentation manager (See Fig. 1 Presentation manager); an application manager (See Fig. 1 Application manager); a user manager; a resource manager; a set top agent; and a program view assistant. The USPTO

considers Applicant's "at least one of" language to be anticipated by any reference containing one of the ~~corresponding~~ corresponding elements.

12. Regarding claims **12** and **22**, they are method claims corresponding to the apparatus claims **1** and **11**, respectively. Therefore, claims 12 and 22 are analyzed and rejected according to claims 1 and 11.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims **4-5** and **15-16** rejected under 35 U.S.C. 103(a) as being unpatentable over Bopardikar in view of Heiske et al. (US #6,714,973)

15. Regarding claim **4**, Bopardikar teaches a set top management layer (See Fig. 2 System Database 56 and Col. 4 lines 20-31). Bopardikar fails to disclose where the set top manager layer implements a state information module to designate the states of resources of the terminal. Implementing a state information module to designate states of resources of a terminal in a communications network is well known in the art as taught by Heiske (See Fig. 1 TS and Col. 3 lines 55-57 and Col. 4 lines 7-51).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have Bopardikar's set top manager layer implement a state information module to designate the states of the resources of the terminal as taught by Heiske to quickly and efficiently ascertain the communication links affected by a terminal failure.

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16. Regarding claim 5, Heiske teaches wherein the said state information terminal is based on the ITU-T X.731 standard (See Col. 4 lines 13-17).

17. Regarding claims 15-16, they are method claims corresponding to the apparatus claims 3-4. Therefore, claims 15-16 are analyzed and rejected according to claims 3-4.

18. Claims 8-10 and 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bopardikar in view of Evain ("The Multimedia Home Platform" EBU Technical Review –Spring 98).

19. Regarding claim 8, Bopardikar teaches an application program interface API for providing configurable functionality (See Col. 4 lines 20-28 System database contains configuration information. A database is an API.) Bopardikar fails to disclose wherein said API enables said terminal to secure controlled access of resources. However, having an API that enables a terminal to secure controlled access of resources is well known in the art as taught by Evain (See Page 8 Security functions and Fig. 3 Security). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have Bopardikar's API enable secure controlled access of resources in order to prevent unauthorized users to access resources.

20. Regarding claim 9, Bopardikar teaches an application program interface API for providing configurable functionality (See Col. 4 lines 20-28 System database contains configuration information. A database is an API.) Bopardikar fails to disclose wherein said API enables said terminal to download, register, start, stop, and monitor applications of the application layer. Evain teaches an API that enables a terminal to download, register, start, stop, and monitor applications of the application layer (See

Figs. 1 and 3 See Page 7-8 Application launch and control and Page 5 Application delivery mechanisms. Applications are securely downloaded in the form of carousel objects. Applications are initiated and terminated. Error signaling and expectations are managed. This is monitoring applications.) Therefore, it would have to one of ordinary skill in the art at the time the invention was made to have Bopardikar's API enable the terminal to download, register, start, stop, and monitor applications of the application layer as taught by Evain so that new applications could be accessed and interacted with by the users of the terminal.

21. Regarding claim 10, Bopardikar teaches an application program interface API for providing configurable functionality (See Col. 4 lines 20-28 System database contains configuration information. A database is an API.) Bopardikar fails to disclose wherein said API enables said terminal to manage audio video and/or other data presentations. Having an API which enables a terminal to manage audio, video and/or other data presentations is well known in the art as taught by Evain (See Fig. 3 Application launch and control session/event management and Pages 7-8 Application launch and control). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Bopardikar's API such that it enabled the terminal to manage audio, video and/or other data presentations as taught by Evain so that audio, video and/or other data presentations could be managed while hiding all aspects of underlying software and hardware.

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22. Regarding claims **19-21**, they are method claims corresponding to the apparatus claims **8-10**, respectively. Therefore, claims 19-21 are analyzed and rejected according to claims 8-10.


Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jamieson W. Fish whose telephone number is 703-305-0884. The examiner can normally be reached on 8-5.

24. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ngoc Vu can be reached on 703-305-4946. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

25. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JF ~~12/3/04~~
Jan. 19, 2005


ANDREW FAILE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600